

Remarks:

Reconsideration of the application is requested.

Claims 1-27 are now in the application. Claims 1 and 16 have been amended. Claims 24-27 have been added.

Support for the subject matter of newly entered claims 24 and 26 can be found on page 15, lines 20-22, of the instant application.

Support for the subject matter of newly entered claims 25 and 27 can be found in Figs. 5 and 6 showing that the optical signal produced has a length not greater than the length of the corresponding bit of the digital electrical signal.

In item 2 on page 2 of the above-identified Office action, the drawings have been objected to because Figs. 2 and 5-8 contain elements without a legend. Enclosed are new drawings appropriately labeled.

Should the Examiner find any further objectionable items, Counsel would appreciate a telephone call during which the matter may be resolved.

In item 4 on page 2 of the Office action, claims 1, 4, 7-8, 10-14, 16, 19, and 22-23 have been rejected as being anticipated by *Epworth* (GB 2 269 953) under 35 U.S.C. § 102.

In item 5 on page 3 of the Office action, claims 2-3, 5-6, 17-18, and 20-21 been rejected as being obvious over *Epworth* in view of *Das et al.* (US 5,703,708) under 35 U.S.C. § 102 (assumed to be 103).

In item 6 on page 4 of the Office action, claims 9 and 15 been rejected as being obvious over *Epworth* in view of *Frankel* (US 6,096,496) under 35 U.S.C. § 102 (assumed to be 103).

The rejections have been considered and claims 1 and 16 have been amended in an effort to even more clearly define the invention of the instant application. Support for the changes is found on page 4, lines 18-25, of the specification.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 (similarly claim 16) as amended calls for, inter alia:

An optical transmitter for generating a digital optical signal sequence, comprising:

a plurality of independently drivable light transmitters, said light transmitters generating respective optical signals for respective bits of a digital electrical signal sequence, said respective optical signals being combined and superposed into an optical signal path; and

a control device distributing the bits between said light transmitters, said bits being distributed such that ***before a HIGH state output, a respective light transmitter is in a LOW state.***

The inventive concept of the invention of the instant application is stated in the paragraph bridging pages 4 and 5, reproduced below.

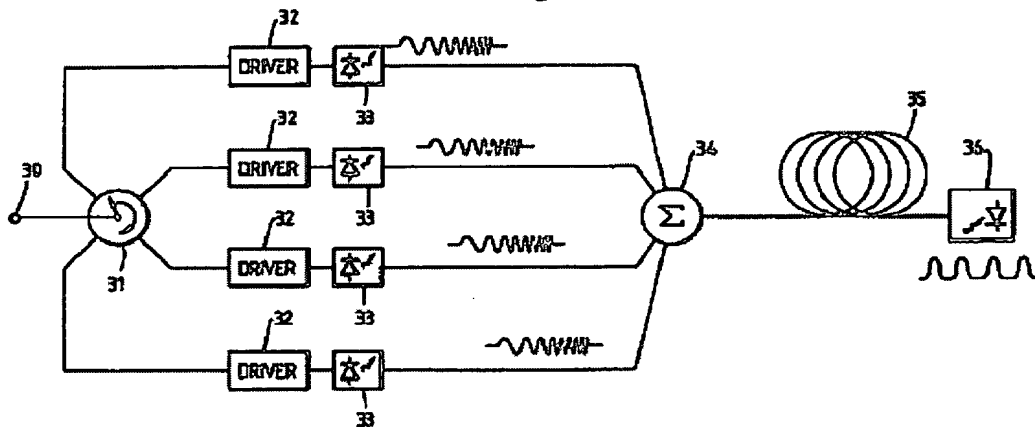
The present invention is based on the concept of always beginning a logic "1" ("1" bit) after the longest possible number of logic "0" signals ("0" bits) in order to ensure that the rising edge is precisely defined and, moreover, is not disturbed by post-oscillation signals of preceding "1" bits. Consequently, according to the invention, ***the driving of a light transmitter for generating a "1" bit is intended always to begin from the logic value "0"***, and a plurality of "0" bits should be present before a "1" bit is generated again. For this purpose, the invention envisages the use of a plurality of light transmitters between which are distributed the light signals or bits of an electrical input signal that are to be generated. If "N" is equal to the number of light transmitters then each light transmitter needs to transmit only upon every N-th bit and has sufficient time in the interim to return completely to the value "0". Each light transmitter is driven independently in this case.

(emphasis added)

The purpose of *Epworth* is to overcome pulse spreading effects due to dispersion in the transmission paths. This is achieved in *Epworth* by using various lasers, outputting a chirped pulse having the time-related frequency for the particular dispersive system involved. *Epworth* mentions the problem of temporal fluctuation of a rising edge and the effect of post-oscillation of a falling edge which the invention of the instant application overcomes, but suggests a different approach. The approach of *Epworth* is carried out "by arranging for the rising and falling edges to be steep enough to distribute the power widely across the spectrum so that only a very small proportion lies within the system's pass band, or by including a set of optical modulators, (not shown), one associated with each laser 33, which is operated to gate the laser's output during the rising and falling edges of its chirped pulses." (Last paragraph on page 4 of *Epworth*). Hence, *Epworth* teaches away from the invention of the instant application.

Fig. 3 of *Epworth*, which is re-produced below, clearly shows the pulse emitted by the respective laser corresponding to a time-related frequency.

Fig.3



Clearly, *Epworth* does not show the feature "said light transmitters simultaneously generate said respective optical signals" as recited in claim 4.

It is accordingly believed to be clear that *Epworth* does not show the features of independent claims 1 and 16. Claims 1 and 16 are, therefore, believed to be patentable over the art and because claims 2-15 and 24-25 are ultimately dependent on claim 1 and claims 17-23 and 26-27 are ultimately dependent on claim 16, respectively, they are believed to be patentable as well.

Considering the deficiencies of *Epworth*, it is believed not to be necessary at this stage to address the secondary references *Das et al.* and *Frankel* applied in the rejection of certain dependent claims, and whether or not there is sufficient suggestion or motivation with a reasonable expectation of

success for modifying or combining the references as required by MPEP § 2143.


In view of the foregoing, consideration and allowance of claims 1-27 are solicited.

Petition for extension is herewith made. The extension fee for response within a period of one month pursuant to Section 1.136(a) in the amount of \$ 110.00 in accordance with Section 1.17 is enclosed herewith.

Enclosed is Counsel's payment in the amount of \$ 72.00 (4 x 18.00) for the extra four (4) claims in excess of twenty in accordance with 37 CFR 1.16(c).

Please charge any other fees which might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,



For Applicant

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